Insights quiz review sheet:

1. Name each subatomic particle. Indicate what their respective charges are and their locations

|  |  |  |
| --- | --- | --- |
| Subatomic particle | Charge | Location within atom |
|  |  |  |
|  |  |  |
|  |  |  |

1. Define:

Atom \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ion\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Number of Protons is always equal to the atomic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Atomic mass (aka mass number) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Therefore, to find neutrons, you must subtract \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from atomic mass.
3. Determine the atomic mass, atomic number, number of protons, neutrons, and electrons for the following ATOMS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Atomic number | Number of Protons | Number of Neutrons | Number of Electrons | Atomic Mass |
| Potassium |  |  |  |  | 40 |
|  | 56 |  | 81 |  |  |
|  |  | 53 |  |  |  |
|  |  |  | 41 |  | 73 |

1. Determine the Atomic number, number of protons, electrons, and the charge for the following IONS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Element | Atomic number | Number of Protons | Number of Electrons | charge |
| Silicon |  |  |  | -4 |
|  | 37 |  | 36 |  |
|  |  | 28 |  | +2 |
| Chlorine |  |  | 18 |  |

1. Write the electron configuration for the following atoms in the GROUND STATE
   1. Ca
   2. Ne
   3. Br